

# William C. Clark -- Curriculum Vitae

(April 2019)

## PROFESSIONAL INTERESTS

- Sustainability science, sustainable development, science and technology policy, environmental policy
- Institutional design and human behavioral aspects of adaptive (learning-oriented) management
- Status of would-be scientific advice in the democratic formulation of public policy
- Design of knowledge systems for scientific assessment and decision support

## WORK EXPERIENCE

[Harvard University John F. Kennedy School of Government](#), Cambridge (MA), USA (1987- ): Harvey Brooks Professor of International Science, Public Policy and Human Development (1992- ); International and Global Affairs Area Chair (2009- ); [Sustainability Science Program](#) Co-Director (2006- ); [Weatherhead Center for International Affairs](#) Executive Committee member (1992-2015), Steering Committee member (2000-2012); [Belfer Center for Science and International Affairs](#) Member (1987- ), Assistant Director (1990-1993), Director (1993-4), Board of Directors member (1995- ); [Environment and Natural Resources Program](#) Faculty Chair (1992-1997; 2003- ); [Program on Science, Technology and Public Policy](#) Senior Research Associate (1987-); [Center for International Development](#) Steering Committee member (2006-2011); [University Center for the Environment](#) Vice-chair (1992-1999), Executive Committee member (1999-2004).

[Potsdam Institute for Climate Impacts Research \(PIK\)](#), Potsdam, Germany (2002): Visiting Scholar, working on issues of earth system science and sustainability.

[Center for International Earth Science Information Network \(CIESIN\)](#), Columbia University (NY), USA (1999): Visiting Scientist, working on issues of international environmental assessment and information systems.

[European University Institute](#), Florence, Italy (1989): Jean Monnet Visiting Professor, researching and teaching international environmental policy and comparative environmental risk assessment.

[International Institute for Applied Systems Analysis](#), Laxenburg, Austria (1973-74; 1978-79; 1984-1987): Associate Dean for graduate studies; Research Scholar and Leader of Program on "Sustainable Development of the Biosphere: Interactions between the Global Economy and the World Environment," producing book length studies on the world history of human transformation of the earth, future environments for Europe, impact of environmental change on European forest product sector, environmental restoration and century-scale scenarios for global development.

[Institute for Energy Analysis, Oak Ridge Associated Universities](#), Oak Ridge (TN), USA (1981-84): Research Scientist; Special Technical Assistant to Director Alvin M. Weinberg. Activities: Research on energy/environment interactions, risk assessment; editor of "Carbon Dioxide Review."

[Ecological Policy Group](#), University of British Columbia, Vancouver, Canada (1971-80): Core group member of C.S. Holling's interdisciplinary team exploring theory and practice of ecological policy design. Activities: Case studies in policy analysis and evaluation for resource management; development of interactive workshop approach for orchestrating technical expertise and conflict in the service of practical policy questions.

## PROFESSIONAL ACTIVITIES

Co-Director of the [Sustainability Science Program](#) (2006- ) at Harvard's Kennedy School of Government, which seeks to advance basic understanding of the dynamics of human-environment systems; to facilitate the design, implementation, and evaluation of practical interventions that promote sustainability in particular places and contexts; and to improve linkages between relevant research and innovation communities on the one hand, and relevant policy and management communities on the other. The program supports research, fellowships and training. [see: <http://www.hks.harvard.edu/centers/mrcbg/programs/sustsci>]

Co-Principal Investigator for the **Sustainability Science and Technology: Linking Knowledge with Action Project** (2004- ), which is developing partnerships and dialogues to link sectors and regions in science-based, action-oriented initiatives to promote sustainability. The project contains two closely related elements: a set of focused Partnership Team efforts to link knowledge with action in emerging areas of sustainability science (specifically, the integrated management of production/consumption systems and enhancing resilience and reducing vulnerability of coupled human-environment systems), and a larger International Dialogue on Science and Practice in Sustainable Development to catalyze significant increases in the quantity and effectiveness of knowledge/action partnerships for sustainable development.

Co-Principal Investigator for the **Boundary Organizations for Integrating Knowledge and Action in International Development Project** (2006-2011). Knowing sustainable development is increasingly understood to be a knowledge-intensive process which requires extraordinary improvements in the mobilization of science and technology, the project asks how the choice of institutions for linking practitioners and experts influences knowledge production and its outcomes in the context of a central challenge of sustainability: improving the management of natural resources. In particular, the project seeks to apply, evaluate and extend existing scholarly findings on "boundary organizations" as institutional means for facilitating the collaboration among researchers and users in the production of knowledge for natural resource management in the developing world.

Co-Principal Investigator for the **Institutional Innovations for Linking Knowledge with Action in Global Health Project** (2006-2010), which seeks to understand the revolution in unconventional public-private partnerships that has begun to link knowledge with action – linking what medical science knows with what health systems deliver – with regard to catastrophically deadly diseases of the developing world.

Co-Principal Investigator for the **Institutional Design of Payments for Ecosystem Services Project** (2005-2010), which seeks to understand how recent innovations in the governance of natural resource systems can be modified so as to promote outcomes that are not just effective and efficient, but also equitable. The project focuses on experiments with "payments for environmental services" that are being introduced around the world as an alternative to the regulatory approaches.

Director of **Knowledge Systems for Sustainable Development Project** (2003-2006), an international collaboration that seeks to understand and promote the design of effective systems to harness research-based knowledge for sustainability. In particular, the research asks: What are the characteristics of effective knowledge systems? How does the effectiveness of such systems depend on social and environmental contexts? How can knowledge systems be made more effective in specific circumstances? The project began in Fall 2003 as a collaborative endeavor involving scholars from [Harvard University](#), [Chiang Mai University](#), [Stanford University](#), and the [Economic Commission for Latin America and the Caribbean](#). It is housed at the [Kennedy School of Government](#) within Harvard's [Center for International Development](#) .

Principal in [International Initiative on Science and Technology for Sustainability](#) (2001-2012), an international effort that seeks to enhance the contribution of knowledge to environmentally sustainable human development around the world. The Initiative aims to make significant progress toward three broad and interrelated goals: expanding and deepening the research and development agenda of science and technology for sustainability; strengthening the infrastructure and capacity for conducting and applying science and technology for sustainability; and connecting science and policy more effectively in pursuit of a transition toward sustainability. To this end, the Initiative has developed a series of workshops, outreach activities, and an electronic Forum. [see: <http://sustainabilityscience.org>]

[US National Academy of Sciences](#) (1983- ): Elected member (2002- ); Chair, Member's Section on Human-Environment systems (2005-7); Member, Committee on Science Education for Decision Makers (2014-2016); Member, [Roundtable on Science and Technology for Sustainability](#) (2003-8); Co-chair of Board on Sustainable Development report titled *Our Common Journey: A transition toward sustainability* (1995-1999); Member, Presidents' Coordinating Committee on a Transition to Sustainability (2000-2001), Committee on Global Change (1987-1990), Joint USA-USSR Committee on Global Environmental Strategies (1988-1990), Board on Atmospheric Sciences and Climate (1984-1987), Committee on Applications of Ecological Theory to Environmental Problems (1983-1986).

Design Committee Chair for the [State of the Nation's Ecosystems Report](#) (1997-2008), leading an effort based at the Heinz Center for Science, Economics and the Environment to establish for the White House Office of Science and Technology Policy a system of macro indicators for regular reporting on the state of the nation's ecosystems. [see: <http://www.heinzctr.org/ecosystems/index.shtml>]

Director of the **Global Environmental Assessment Project** (1995-2006), an international, interdisciplinary program to promote better understanding of the actual relationships among science, assessment, policy and management in societies' efforts to grapple with global environmental change. The project was a multiyear, interdisciplinary effort based at Harvard University but drawing on faculty and students from the natural sciences and social sciences as well as practitioners and professional school scholars from around the world. Three volumes reporting on the findings of the project have been published.

Director of the **Research and Assessment Systems for Sustainability Program** (2000-2003), an international program to foster design and evaluation of strategies with which the next generation of national and international global environmental change programs might more effectively integrate and support its research, assessment and decision-support activities. The program seeks to catalyze and contribute to three interrelated lines of work: Broadening the global change agenda to engage more directly the sustainability agenda; developing a place-based, integrated understanding of global change effects and vulnerabilities; and designing, supporting and managing systems that can better integrate research, assessment and decision-support activities on problems of global change.

Director of **Social Learning Project** (1989-2001), an international, comparative study to explore the role of social learning in the management of global environmental risks. A 40 person team from 8 countries documented, analyzed and published a comprehensive 2 volume history of acid rain, stratospheric ozone depletion and climate change from the International Geophysical Year of 1957 to the Rio Conference of 1992.

**Editorial Boards:** [Proceedings of the National Academy of Sciences](#) (Associate editor, 2006-9; Editorial board member, 2006 -- ); [International Security](#) (member, editorial board, 1990- ); [Annual Review of Environment and Resources](#) (member, editorial board, 2001-2012); [Environment: Science and Policy for Sustainable Development](#) (Co-editor 1984-2006; contributing editor 2007--2011); [Conservation Ecology](#) (member, editorial board, 2000-2004).

**Program Reviews:** Chaired or participated in external reviews of the [Venice International University](#) (2011); [Stockholm Resilience Center](#) (2009); [Ecosystem Science and Sustainability Initiative, Univ. of Minnesota](#) (2007); Interdisciplinary and Policy Dimensions of the Earth Sciences (IPDES) Graduate Certificate Program, University of Washington (2006); [Alternatives to Slash and Burn Program, CGIAR](#) (2005); [Tyndall Center for Climate Change Research](#) (2004); Human Ecology Program at EAWAG, the Swiss Federal Institute of Aquatic Science and Technology (1999).

**Advisory Boards and Steering Committees:** [Global Institute of Sustainability, Arizona State University](#), Board of Trustees (2005 - ); [International Institute for Applied Systems Analysis](#), Scientific Advisory Committee (member, 1991-1996; 2004-2010); [Potsdam Institute for Climate Impact Research](#), Science Advisory Board (member, 2000-2003); Heinz Center for Science, Economics and the Environment (trustee, 1999-2003); [International Human Dimensions Programme](#) on Global Environmental Change, Scientific Committee Member (2000-2002); Center for Integrated Study of the Human Dimensions of Global Change, Carnegie Mellon Univ. (member, advisory committee, 1995-1999); [American Association for the Advancement of Science](#) (member, Committee on Science, Engineering and Public Policy, 1990-1996); United States Committee for the International Institute of Applied Systems Analysis (member, 1990-1998); Global Climate Change Program, American Museum of Natural History (advisor, 1989-1991); Office of Interdisciplinary Earth Studies, University Corporation for Atmospheric Research (member, advisory committee, 1988-1993); [Social Science Research Council](#) (member of Committee on Global Environmental Change, 1988-1995); [International Union for the Conservation of Nature](#), Commission on Ecology (member, 1987-1990); Climate Research Program, Resources for the Future (member, advisory committee, 1987-1992); Global Climate Change Research Program, [US Environmental Protection Agency](#) (1987-1990); Program on Climatic, Biotic and Human Interactions in the Humid Tropics, United Nations University (member, 1982-1986); Project on Vulnerability of Marginal Agriculture to Climate Change, World Climate Impacts Program of WMO/SCOPE/UNEP (member, advisory committee, 1982-1986).

**Special Invitational Lectures:** [Pontifical Academy of Sciences](#) lecture on “What Must Be Sustained to Enable Sustainable Improvements in People’s Well-being? (2018); [Wege Lecture on Sustainability, University of Michigan](#) on “Pursuing sustainability: linking science with practice (2016); [Mitchell Lecture, University of Maine](#), on “Mobilizing knowledge to shape a sustainable future” (2014); [UC Davis Distinguished Speaker Series](#), “Linking knowledge with action for sustainability” (2014); [Geller Lecture, Clark University](#), on “Sustainability Science” (2013); [Leuphana Frontiers in Sustainability Science Lecture, Leuphana University, Germany](#) (2012); Weinberg Lecture, Oak Ridge National Laboratory, on “Science and technology for sustainability” (2002); Self Graduate Fellowship Lecture, University of Kansas, on "Sustainable development in an era of global change" (2001); Bologna University Summer School in Environmental Policy, on “Social learning in the management of global environmental risks” (1997); Sigma Xi, The Scientific Research Society, National College of Lecturers on “Managing planet earth” (1991-1993); World Economic Forum, on "Global environmental change" (1989) and "Industrial ecology" (1994); Salzburg Seminar on "Managing environmental risks" (1987); Talliores Seminar on "International perspectives on environmental risks" (1987); Atwood Lecture, Clark University on “Sustainable development of the biosphere” (1984).

## HONORS, AWARDS AND MEMBERSHIPS

[US National Academy of Sciences](#) (2002): Elected member as “the premier analyst of the nexus of global environmental science and policy. [William Clark’s] path-breaking research on sustainability, human dimensions of global change, and social learning in the management of acid rain, ozone depletion, and climate change are key to understanding the role of science and the evolution of policy.”

[MacArthur Prize](#) (1983): Awarded to "a small number of exceptionally talented individuals for previous achievements giving evidence of originality, dedication to creative pursuits, and capacity for self-direction."

[Humboldt Prize](#) (2002): Awarded by German governmental foundation to “foreign scholars with internationally recognized academic qualifications as a lifelong tribute to past academic accomplishments.”

[American Association for the Advancement of Science](#) (2007): Elected as Fellow for “distinguished contributions to interdisciplinary studies of global environmental change, particularly in regard to the uses of scientific knowledge in sustainability policies and practice.”

[Honorary Doctorate, Leuphana University](#), Luneburg, Germany (2012): Awarded for “leadership in launching the field of sustainability science.”

[Ecological Society of America, Sustainability Science Award](#) (2012) for “a scholarly work that makes the greatest contribution to the emerging science of ecosystem and regional sustainability through the integration of ecological and social sciences,” shared with co-authors Reid, R. S., D. Nkedianye, M. Y. Said, D. Kaelo, M. Neselle, O. Makui, L. Onetu, S. Kiruswa, N. O. Kamuaro, P. Kristjanson, J. Ogutu, S. B. BurnSilver, M. J. Goldman, R. B. Boone, K. A. Galvin, N. M. Dickson and William C. Clark. 2009. “Evolution of models to support community and policy action with science: Balancing pastoral livelihoods and wildlife conservation in savannas of East Africa.” *Proc. Natl. Acad. Sci. U. S. A., Early Edition*:doi:10.1073/pnas.0900313106.

[Phi Beta Kappa Prize for Excellence in Teaching](#) (2011) Harvard College, awarded for giving “his students the ability and incentive to use their knowledge to build a better world.”

[Manuel Carballo Teaching Award](#), John F. Kennedy School of Government (2000): Awarded each year to the professor who best demonstrates “outstanding dedication to students, excellence in the professional field, and commitment to public service.”

**Yale University** Bachelor of Science, *magna cum laude*, "honors with exceptional distinction" in biology (1971). Fellows' Prize, Saybrook College of Yale University (1971).

## EDUCATION

**Doctor of Philosophy** in ecology, [University of British Columbia](#) (1979): Thesis on spatial structure/population dynamics relationships in epidemic ecosystems. Trained in computer modeling and systems analysis.

**Bachelor of Science**, Yale University (1971): Emphasis on ecology, training in political economics and government.

**Certification**, U.S. National Air Pollution Control Administration program in legal aspects of pollution management (1970).

## PERSONAL DATA

**Born:** December 20, 1948; Greenwich, Connecticut, USA

**Citizenship:** USA

**Marital Status:** Married to Anna Maria Clark, two children (Graham 1985, Adam 1989)

**Interests:** Alpine hiking, classical music, and medieval architecture

**Languages:** English, German

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